

OBSERVATIONS ON *COCCIDÆ* (No. 10).

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FIORINIA SULCII, *n. sp.*

Leucaspis pini, A. C. F. Morgan, Ent. Mo. Mag., xxv, p. 189, pl. iii, fig. 3 (1889); *id.*, iii, n. s., p. 13 (1892). Newstead, Ent. Mo. Mag., v, n. s., p. 181, fig. (1894).

♀ adult lying within the second moult; the latter, however, is completely hidden beneath the scale, which is entirely secreted at the 2nd stage. ♀. Pygidium (figs.



1, 2, 3) generally with two pairs of very short, rounded lobes; sometimes there are a third or even a fourth pair, but these are inconstant and asymmetrical; on either side beyond the median lobes are five or six (generally five) rather long spiny hairs, and between them two very short ones; within the margin are two irregular rows of pores or spinnerets; grouped spinnerets arranged in the form of an arch, but generally well separated: the anterior group consists of from five to ten, the anterior laterals from ten to

twelve, and the posterior laterals from nine to twelve.

Scale of the ♀. In my description (*l. c.*) for "second moult yellow, &c.," read "larval moult yellow, &c.;" there is only the larval moult visible at the cephalic extremity. Larva rather short-ovate. Eyes black. Antennæ of five joints; 1st, 2nd, 3rd and 4th shortest, and in length nearly equal; 5th about as long as the rest together, is strongly ringed, and has three very long hairs. Legs with coxa and femur broad; tibiæ and tarsi much thinner, the latter very short, only about the same length as the claw; digitules to claw and tarsi simple. Mentum uniaarticulate; unexpanded filaments reaching nearly to end of body. Pygidium with two large median, almost rectangular lobes; immediately within these are the two long anal setæ, and two very short ones; the latter arising from a central raised prominence. On either side of the lobes are a varied number of broad, and very finely serrated plates, and several small spines. The median lobes are very distinct, and their bases run almost through the pygidium. Segments each with two elongated pores, one ventral and one dorsal.

It is entirely through the persistent investigation of the species by Herr Karel Šulc, and his discovery of both the adult ♀ of this species and *Leucaspis pini*, Hartig, that I have been able to clear up the identity of the two species. It is unfortunate, however, that I did not in the first instance describe the species as a new one; but like Mr. Morgan (*l. c.*) I was in doubt all along as to whether the peculiar fringe of blunt spines on the pygidium of ♀ *Leucaspis pini*, as described by Signoret and Löw, were really chitinous or only waxy secretions. Now the doubt no longer exists since Herr Šulc has discovered the

adult ♀ of *Leucaspis pini*, Hartig, which, after treatment with potash, still retains the marginal fringe of blunt spines, which is so characteristic of the genus.

Mr. Morgan, in his description (*l. c.*), says, "the posterior margin of the female adult, unlike most species of *Diaspina*, is entire, possessing neither plates nor lobes." In this my new species does not agree, all have the very small plates, but they vary exceedingly in number, scarcely two being alike. It is, therefore, quite possible that some have none at all. The rest of his description agrees so well, that I feel almost certain of the identity, and Herr Sulo is of the same opinion.

EXPLANATION OF THE FIGURES.

1 and 2 after Sulo, types coll. Newstead.

3 ,, type coll. Sulo; this is a very curious form, having three *odd* lobes grouped together on one side.

LECANIUM PERFORATUM, *n. sp.*

♀ adult (fig. 1, as seen with transmitted light), viviparous; dark piceous, margins paler; extremely flat, short-ovate, generally much widened posteriorly; on either side of dorsum are well defined, radiating, transverse carinae; the spaces between finely rugose. Dermis tessellated with irregular rows of tesserae; four on either side of dorsum; margins of each tessera with very minute pores, which, under a low power, look very like perforations (fig. 2); posterior half of submarginal row with large, clear, jagged spaces (fig. 2); about five on either side of dorsum; marginal row finely granulated outwardly. Antennae (fig. 3) of eight joints; 2nd, 3rd, 4th and 8th longest, 1st, 5th, 6th and 7th shortest, and in length nearly equal; 8th generally the longest. Legs rather short; intermediate and posterior pair wide apart; tarsi much shorter than the tibiae; trochanter with a rather short hair; digitules to tarsi ordinary, those of the claw much dilated at the extremity; claw short. Rostral filaments unexpanded, about the same length as the legs. Anal cleft very deep; lobes very small.

Long, 3.50—4 mm.; wide, 2.50—3 mm.

♀, prior to gestation, dull reddish-brown; younger forms much lighter. Larva dull reddish; antennae of six joints, of which the 3rd and 6th are longest; 3rd longest, 4th and 5th equal, about same length as 1st and 2nd. Rostral filaments unexpanded, extending beyond tibiae of posterior legs. Legs rather short; digitules to tarsi and claws ordinary. Anal setae rather shorter than is usual in the genus. Margins with a few stout hairs; and there are four very stout *blunt* spines, one over each of the tracheae.

Hab.: Palm House, Kew; very numerous on the under-side of the leaves of *Caryota Cumingii*, a tropical palm. August, 1894.

This very interesting and clearly distinct species was kindly forwarded to me by Mr. J. W. Douglas, to whom the specimens were sent by Mr. D. Morris, Assistant Director of the Royal Gardens. It is very closely allied to *L. tessellatum*, Sign. (Essai, p. 231, pl. xii, fig. 4); but the eight-jointed antennæ, the central division and arrangement of the pores in the tesseræ, readily distinguish it from this or any other known species. The larvæ occurred both beneath and in the bodies of the adults, which is conclusive proof that the ♀ is viviparous. This, together with the other characters set forth, place the species in Signoret's 1st Series.

Chester: September 5th, 1894.

Coleoptera at Weymouth and Portland.—I spent the latter part of March last at Weymouth, and in consequence of the beautiful spring weather was able to do a good deal of collecting work. The hedges and trees were only showing very faint signs of the coming foliage, I therefore devoted most of my time to the coast and immediately adjoining land. Attention was mainly given to the *Adephaga*, and during ten days I was able to obtain about one-sixth of the total species found in Great Britain; of course a large proportion of these were very common, but a few were new to me, and are good species.

One day was spent at Poole: there I obtained *Cicindela sylvatica*, but though I kept a sharp look out for *C. maritima* all the time, I failed to obtain a specimen; perhaps it was too early, though *campestris* was in the utmost profusion all along the coast line, occurring on the clay cliffs as well as on the sandy portions of the coast.

On the Isle of Portland I obtained a few good insects (I was not lucky enough to come across *Seybalicus oblongiusculus*), the best were *Licinus silphoides* and *Cy-mindis axillaris*, both new to me.

On the Chesil Beach I obtained one specimen of *Mesoreus Wetterhalii* and *Cillenius lateralis* in great abundance, as also *Harpalus neglectus* and many common things.

At Weymouth itself my best captures were *Acupalpus consputus* (1), *Trechus lapidosus* (3), and *Harpalus rotundicollis*. *Harpalus* and *Calathus* were distinctly the commonest genera. *Bembidium varium* was in great abundance in the salt marshes near the town, along with *Pogonus chalceus*, and *littoralis* (sparsely).

In the other divisions perhaps the best take was a specimen of *Cardiophorus asellus* on Chesil Beach, where I found two last year about the same time.

Amongst those taken were *Aphodius luridus* (under a stone with *Agriotes lineatus* and *sputator*), *Prasocuris junci* (the only Phytophagous beetle met with), *Anthicus humilis* and *antherinus*, *Meloë proscarabeus*, *Apion hæmatodes*, *miniatum* and *radiolus*, *Oliorhynchus tenebricosus*, *Philopodon geminatus*, *Barynotus obscurus*, *Hypera variabilis*, *Silpha lævigata*, *rugosa* and *atrata*, *Bryaxis Waterhousei* and *Helferi*, *Micraspis sedecimpunctata*, *Nitidula bipustulata* and *rufipes*, *Dermestes murinus*, *Aleochara lata*, *Quedius tristis*, *Cafius xantholoma*, *Xantholinus tricolor*, *Bledius spectabilis*, and many other common *Staphylinidæ*, &c.—T. HUDSON BEARE, Park House, Richmond: August, 1894.